REMARKS:

1) The specification has been amended at page 18 line 7 to more-directly support the subject matter of original claim 14. Since this subject matter was originally disclosed in claim 14, the corresponding amendment of the specification does not introduce any new matter. Please enter the amendment.

2) The claims have been amended as follows. Independent claims 1 and 15 have been amended to incorporate subject matter based on original claim 14. Claim 14 has been canceled. Some claims have been amended editorially for streamlining and clarification. These amendments do not introduce any matter. Please enter the claim amendments.

3) Referring to pages 2 and 3 of the Office Action, the election of Species B relating to a step-wise reduction of power is hereby affirmed. After the present amendment, claims 1 to 11, 13, 15 to 17, 20 and 21 read on the elected species. Claims 1 to 9, 13, and 15 to 17 are generic. The non-elected claims 12, 18, 19 and 22 to 24 remain "withdrawn", but depend from generic claims. Thus, if the generic claims are ultimately found allowable, the Examiner is respectfully requested to rejoin, consider and allow the dependent non-elected species claims 12, 18, 19 and 22 to 24.

4) Referring to pages 3 and 4 of the Office Action, two Replacement Sheet of Drawings and a Drawing Transmittal Letter are enclosed with this Response. Please replace original drawing sheets 2/5

and 5/5 with the enclosed Replacement Sheets 2/5 and 5/5 bearing Figs. 2, 5A and 5B. In Fig. 2, handwritten text has been replaced by printed text and unnecessary German text has been omitted. In Figs. 5A and 5B, handwritten text has been replaced by printed text. The other original sheets bearing Figs. 1, 3 and 4 remain unchanged. Accordingly, please withdraw the objection to the drawings.

5) Referring to pages 4 and 5 of the Office Action, the rejection of claim 14 for lack of enablement under 35 USC 112(1) is respectfully traversed. The subject matter of claim 14 has now been incorporated in amended claims 1 and 15. In any event, that subject matter was fully enabled in the original written description (see page 17 line 17 to page 18 line 18). While the particular term "information transducer arrangement" was not included in the original written description, the description has now been amended at page 18 line 7 to expressly use that term. From the overall disclosure of the paragraph bridging pages 17 and 18 of the original specification, a person of ordinary skill in the art would have been enabled to carry out the features according to original claim 14. Namely, the specification describes sensors and circuitry making up such information transducer arrangements, as well as the features or functions achieved with such information transducer arrangements. Accordingly, please withdraw the rejection under 35 USC 112(1).

6) Referring to the middle of page 5 of the Office Action, the objection to claim 3 is respectfully traversed. Regarding power

control devices arranged in the power consuming devices, please see the original specification at page 15 lines 15 to 17, as well as drawing Fig. 1 reference numbers 12 and 50. Namely, this original disclosure clearly explains and shows a power control device (50) incorporated in a power consuming device (12). Please withdraw the objection in claim 3.

7) Referring to pages 5 to 11 of the Office Action, the rejection of claims 1 to 9, 13 to 17, 20 and 21 as obvious over US patent 6,921,987 (Marin-Martinod) is respectfully traversed. Independent claims 1 and 15 will now be discussed respectively in comparison to the prior art.

8) Present independent claim 1 recites a combination of features that is not disclosed and would not have been suggested by Marin-Martinod.

Claim 1 is directed to an on-board galley arrangement in a passenger transport aircraft, including plural electrical power consuming devices installed in a galley of the aircraft as well as a power control system for controlling the electrical power consumption of this galley equipment, i.e. power consuming devices installed in the galley. The Examiner has acknowledged that Marin-Martinod does not disclose the power distribution and control system for power consuming devices in the galley of the aircraft. Instead, the reference discloses a power management system for controlling power consumption of passenger accessory equipment such as a reading light, an electrical power socket for a portable computer, video equipment, electrical seat actuators,

and massage devices (col. 1 lines 13 to 23). Particularly, the object of Marin-Martinod is to manage and limit the total power **consumed by the passengers** in operating these various passenger comfort and convenience accessories (col. 1 lines 27 to 62).

The Examiner asserts that it would have been obvious to apply the power management system concepts of Marin-Martinod to the power consuming devices in the aircraft galley. However, neither the reference nor the Examiner has given any detailed suggestion or motivation in this regard. The reference expressly focuses on the optional or convenience power demands **of the passengers** in using passenger convenience accessories, and says nothing about the mandatory or required power demands of built-in equipment of the aircraft, such as the galley equipment.

More importantly, the power management issues, concerns and concepts are quite different from one another in these two different contexts. Namely, the teachings of the reference show that certain passenger convenience accessories can simply be stopped or disabled if excessive power is being consumed by all of the passengers. This does not cause any problem, because these passenger convenience accessories are non-essential accessory equipment that is not mandatory in the normal operation of a passenger flight. On the other hand, the power management system according to present claim 1 controls the galley equipment, which is mandatory for the operation of the passenger aircraft. Thus, the power management concept must take into account an allocation of power among the power consuming devices, rather than simply disabling certain devices.

Also, the galley equipment is used in an orderly fashion controlled by the aircraft crew as required for a given phase of a passenger flight. For example, the ovens, coffee makers, trash compactors, and the like are used at particular times in particular sequences for carrying out a meal service or the like during a flight. On the other hand, the passenger convenience devices of Marin-Martinod are used essentially at any time at the desire or whim of the individual passengers.

Therefore, the power management concepts for dealing with the power demand are significantly different in the context of Marin-Martinod in comparison to the context of the present invention of claim 1, so that a person of ordinary skill would not have been motivated to directly apply the teachings of the reference in the different context of power management of the galley equipment.

Furthermore, present claim 1 calls for a databus connected in common to each one of the power consuming devices and to the control unit. Contrary to the Examiner's assertion in this regard, Marin-Martinod does **not** disclose the information transfer network (18) connected to each one of the power consuming devices. Instead, the information transfer network (18) is connected between a central power management unit (20) and several power management sub-units (16A, 16B, 16C). Such a sub-unit (16A) includes a local control unit (36) that is connected via individual conductor lines to the individual loads associated with that local control unit. There is **no** universal or common databus that is connected to each one of the power consuming devices and to a control unit.

As a result of the above distinction, it is also clear that the arrangement according to Marin-Martinod does not include a control unit that is adapted to transmit a control command to respective power consuming devices that are identified individually by an address code via the databus. The Examiner has acknowledged that the reference does not disclose the use of address codes, but asserts that this would have been obvious because "all microprocessors use address codes to associate memory locations and select different output ports". However, such a rationale and such a pertinent use of address codes, only pertains when several subscribers, e.g. several power consuming devices, are all connected to and accessible via the same common databus. But that is not how the system of Marin-Martinod is arranged. If each power consuming device has its own conductor line (as according to the reference), then it is not necessary to identify that power consuming device by an address code on that conductor line, because the individual conductor line provides a hard-wired permanent physical connection of a particular power consuming device to a particular port of the controller. It is only necessary to provide an address code for a control command if that control command is transmitted via a databus that simultaneously serves plural subscribers or power consuming devices. That is not disclosed and would not have been suggested by the reference.

Still further, present claim 1 calls for a database that stores a catalog of power management measures (e.g. procedures, tactics, protocols) as well as status information regarding a respective power consuming device, and a control unit that is

adapted to compare an actual power consumption to a predetermined power value and to call up a suitable power management measure from the database depending on the result of the comparison. The Examiner has asserted that Marin-Martinod discloses such a feature at col. 4 lines 32 to 40. However, the actual disclosure of the reference does not correspond to or suggest the present inventive feature. Namely, the memory of Marin-Martinod does not store a catalog of power management measures (procedures, tactics or protocols) and the control unit does not compare actual power consumption to a predetermined power value. Instead, the memory stores previously determined **estimated nominal** values of power consumption in the cited embodiment (see col. 4 lines 32 to 39). This embodiment merely involves an estimate of the power being consumed, based on previously stored nominal values, rather than actual measured values. On the other hand, a different embodiment uses current sensors to measure the actual power consumption, but this embodiment expressly omits the memory (54), because there is no storage of previously determined nominal values (col. 7 lines 28 to 60, and particularly lines 33 to 42). Thus, in one embodiment the reference uses a memory to store previously determined estimated nominal power consumption values but does not measure actual current consumption, and in a different embodiment the reference measures actual power consumption but does not include the memory for storing any previously determined values. In view of these disparate teachings of the reference, there would have been no suggestion to provide a system with a control unit that is adapted to compare an actual present power consumption to a prescribed value

and to call up a suitable power management measure stored in a database (which also stores operating status information as will be discussed in more detail next).

Present independent claim 1 has been amended to incorporate the subject matter of original claim 14. Thus, claim 1 now additionally recites that each power consuming device includes an information transducer arrangement that is adapted to transmit status information regarding an operating status of the respective power consuming device via the databus to the control unit. Furthermore, the control unit is adapted to store the status information in a status report for this power consuming device in the database. As described in the original specification at page 17 line 17 to page 18 line 18, the inventive system thereby can carry out additional functions beyond a power management. For example, the system may also provide service and maintenance functions, e.g. in the manner of a diagnostic or monitoring system. For example, operational status information such as "ON", "OFF", "STANDBY" or "FAULT/ERROR" status, is provided by the power consuming device and stored in the database. Also, for example, the operating duration of a particular power consuming device can similarly be recorded and stored in the database. This information can then be monitored from the control unit, for purposes of maintenance, repair and monitoring the operation of the devices.

In this regard (with respect to original claim 14), the Examiner asserted that column 5 lines 47 to 52 of the reference disclose such a feature. However, the feature of the reference merely involves calculating an estimation of the total power

consumption at a given instant. For this purpose, the control unit determines the sum of the predetermined nominal power values stored in the memory for the loads that are operating. That does not involve and would not have suggested transmitting operating status information from a power consuming device to the control unit to be stored in a status report in the database. To the contrary, this merely involves the control unit determining a sum of previously stored nominal power consumption values, rather than receiving or storing any actual present status information.

Moreover, the present invention of amended claim 1 uses the databus for transmitting the status information from the power consuming device to the control unit. That is the same databus that is also used for transmitting the control commands. There is no such databus in the system according to Marin-Martinod. Instead, the local control unit (36) that calculates the estimated nominal power is connected by separate control lines to the individual consuming devices, with no status information being provided via a databus back to the control unit.

Also, there is no suggestion by the reference toward storing such status information in a database for later call-up or use, e.g. for diagnostic, maintenance or service purposes.

9) Present independent claim 15 is directed to a method of distributing electrical power to a plurality of power consuming devices, and recites certain special features that would not have been suggested by the reference.

The method of claim 15 involves storing a catalog of power management measures (e.g. procedures, protocols, tactics) in a

database, measuring an actual current consumption value of a power consuming device and comparing this actual current consumption value to a predetermined maximum value. As discussed above Marin-Martinod does not disclose and would not have suggested such features. Particularly, in one embodiment the reference measures actual current consumption values, but in that embodiment the memory (54) is purposely omitted (col. 7 lines 28 to 42). In a different embodiment, the system uses a memory to store previously determined nominal power values, but that embodiment does not measure actual current consumption values (col. 5 lines 47 to 64).

Based on the result of the abovementioned comparison between actual and predetermined values, the method of present claim 15 further involves calling up a suitable power management measure from the database and then transmitting a control command dependent on this power management measure. Particularly, the control command is transmitted via the databus to a selected one or group of the power consuming devices. The affected device or devices are then controlled in response to the control command. The reference would not have suggested such steps, already because it does not provide a databus connected to the plural power consuming devices.

Present claim 15 further involves transmitting status information on the databus from a respective power consuming device. This status information regards an operating status of this power consuming device. The status information is then stored in a status report in the database.

Thus, in the method according to present claim 15, the databus is used for transmitting both control commands and status information respectively in opposite directions between the control unit and the power consuming devices. The reference would not have suggested such an operating method because there is not even such a databus. Also according to the method of present claim 15, the database is used for storing both the power management measures and the status information. The reference would not have suggested such steps, because it does not provide such a database for storing both of these types of information.

10) For the above reasons, the respective inventions of present claims 1 and 15 would not have been obvious in view of the reference. The dependent claims need not be individually discussed at this point, because they are patentable already in view of their dependence. The Examiner is respectfully requested to withdraw the obviousness rejection applying Marin-Martinod.

11) Regarding pages 11 and 12 of the Action, the rejection of claims 10 and 11 as obvious over Marin-Martinod in view of US Patent 6,744,149 (Karuppana et al. '149) is respectfully traversed.

The Examiner has said that the step-wise reduction of power is understood as meaning to continually lower the power in an incremental process. That is not the definition intended by the applicant or supported by the application. The power reduction does not need to be carried out "continually". Rather, the "step-wise reduction of power consumption" means reducing the power in one or more successive discrete power reduction steps,

wherein each power reduction step involves only a portion of a total maximum power.

In the telephonic Election Requirement of October 12, 2005, repeated in the present Office Action, the Examiner has asserted that there is a patentable distinction between a time-staggered power distribution (Species A) and a step-wise power reduction (Species B). Applicant has elected Species B, especially as recited in present claims 10, 11, 20 and 21 as well as generic claims 1 to 9, 13 and 15 to 17.

In this rejection of claims 10 and 11, the Examiner has tacitly acknowledged that Marin-Martinod does not expressly disclose a step-wise reduction of power to reduce the power distributed to the individual power consuming devices, while only generally mentioning that the power can be reduced or time-staggered. In this regard, the Examiner has further referred to Karuppana et al. '149. However, in view of the Election Requirement, it must be understood that there is a patentable distinction between the different modes or manners of carrying out a power reduction. Thus, a person of ordinary skill in the art would not have been motivated to change from one power reduction concept to another power reduction concept, because such a change would have involved a patentable distinction. Persons of ordinary skill in the art do not carry out changes that involve patentable distinctions. Thus, a person of ordinary skill in the art would not have modified the teachings of Marin-Martinod to carry out the patentably distinct teachings of Karuppana et al. '149.

Still further, claims 10 and 11 depend from claim 1, which is distinguishable from Marin-Martinod as discussed above. Also, claim 1 now incorporates the subject matter of prior claim 14, which was not further rejected in view of the combination of Marin-Martinod and Karuppana et al. '149.

For the above reasons, the Examiner is respectfully requested to withdraw the rejection of claims 10 and 11 as obvious over Marin-Martinod in view of Karuppana et al. '149.

12) The additional prior art made of record requires no particular comments because it has not been applied against the claims.

13) Favorable reconsideration and allowance of the application, including all present claims 1 to 13 and 15 to 24, are respectfully requested.

Respectfully submitted,
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Walter F. Fasse 3/1/06

Name: Walter F. Fasse - Date: March 1, 2006

In the Drawings:

Please replace original drawing sheets 2/5 and 5/5 with the enclosed Replacement Sheets 2/5 and 5/5 bearing Figs. 2, 5A and 5B. In Fig. 2, handwritten text has been replaced by printed text and unnecessary German text has been omitted. In Figs. 5A and 5B, handwritten text has been replaced by printed text. The other original sheets bearing Figs. 1, 3 and 4 remain unchanged.

[RESPONSE CONTINUES ON NEXT PAGE]